MAAESF Standard Setting Results June 2-3, 2015

The MAAESF Body of Work Standard Setting meeting was conducted in Jackson, MS from June 2-June 3, 2015. Thirty-one panelists were recruited to perform the Standard Setting, with 10 setting standards for Grade 5, 11 setting standards for Grade 8, and 10 setting Standards for High School. The demographic characteristics for the three groups are presented in Table 1.

Table 1: Demographic Information for Panelists

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	Grade		
	5	8	HS
Gender			
Male	2	3	4
Female	8	8	6
Race/Ethnicity			
White	6	7	6
Black	4	4	3
Hispanic	0	0	0
Asian	0	0	0
Pacific Islander	0	0	1
American Indian	0	0	0
Years of Educational Experience			
0-5	0	2	0
5-10	1		2
10-15	2	2	2
More than 15	7	5	6
Educational Experience			
Students with disabilities	5	6	6
Students with limited English proficiency	2	2	1
Economically Disadvantaged Students	6	7	5
Gifted and Talented Students	2	3	2
General Education	7	8	7

The score ranges that resulted from the three rounds of standard setting are presented in Table 2 for all three grades.

Table 2: Score Ranges for Each Performance Level: Committee Results

	Minimal		Bas	Basic		Proficient		Advanced	
	First	Last	First	Last	First	Last	First	Last	
5	0	98	99	115	116	146	147	175	
8	0	64	65	98	99	129	130	175	
HS	0	73	74	101	102	129	130	175	

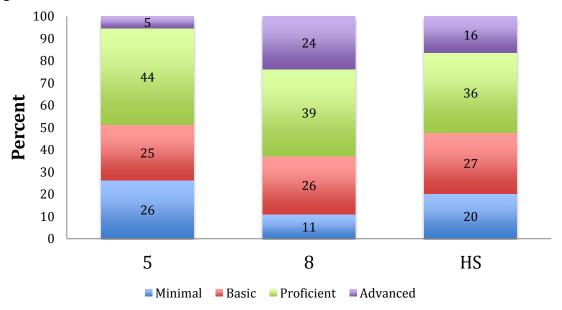
To interpret this table, for grade 5, scores in the "Minimal" category ranged from 0 to 98, scores in the "Basic" category ranged from 99 to 115, scores in the "Proficient" category ranged from 116 to 146, and scores in the "Advanced" category ranged from 147 to 175. The results for grades 8 and HS can be interpreted similarly.

Of note in this table is that the fifth grade cut scores were higher than the other two grades. The effect of this can be observed when the percent of students classified into each category is examined. This information is presented in Table 3, and graphically in Figure 1.

Table 3: Percent of Students in Each Performance Level: Committee Results

	Minimal	Basic	Proficient	Advanced
5	26	25	44	5
8	11	26	39	24
HS	20	27	36	16

Figure 1: Percent of Students in Each Performance Level: Committee Results



Due to the large discrepancies between fifth grade and the other two grades, the scores were examined. There was less consistency among the raters in the fifth grade group,

than in the other two groups. In an attempt to smooth the results to make them more comparable across grade levels, the cut scores were adjusted. This was accomplished by adjusting the scores by the standard deviation of the cut scores.

For the first cut score (Minimal/Basic), the standard deviation was 6.7 points. Therefore, an adjustment of 1 to 2 standard deviations (6.7 to 13.4 points) would be a reasonable value of the cut score. The goal was to make the adjustment as small as possible to result in cut scores that were more comparable across the grades, with the maximum adjustment to be 12 points. The cut was adjusted by 9 points, or slightly less than 1.5 standard deviations.

The other cut of concern was the top cut score (Proficient/Advanced). In this case, the standard deviation of the cut scores was smaller, about 2.5 points. Following the idea of staying within two standard deviations, there was an initial adjustment of 5 points, however, the difference across the cut scores was still quite large. This difference was due to the fact that this committee had a more stringent standard than the other two committees. The initial smoothed result was determined to still be discrepant. Therefore, in order to obtain the final smoothed result, the differences between the original cut (146) and the other two grades (130) was computed (16 points) and the difference between the original cut and the first smoothed cut (141) was found (5 points). The average of these two differences was taken as a compromise between the original cut score obtained by the panelists, and the cut score determined by the other two grade level panels. The resulting smoothed score was determined to be 135. This compromise resulted in a cut score more in line with the other two grades. The score ranges based on these new cuts are provided in Table 4.

Table 4: Score Ranges for Each Performance Level: Smoothed Results

	Minimal Basic		sic	Proficient		Advanced		
	First	Last	First	Last	First	Last	First	Last
5	0	89	90	115	116	134	135	175
8	0	64	65	98	99	129	130	175
HS	0	73	74	101	102	129	130	175

It can be seen in the table that the score ranges are more similar after smoothing than they were before smoothing. The affect that this has on the percent of students in each performance level is provided in Table 5, and graphically in Figure 2. These new cut scores lead to more consistent results across grades.

Table 5: Percent of Students in Each Performance Level: Smoothed Results

	Minimal	Basic	Proficient	Advanced
5	17	34	29	20
8	11	26	39	24
HS	20	27	36	16

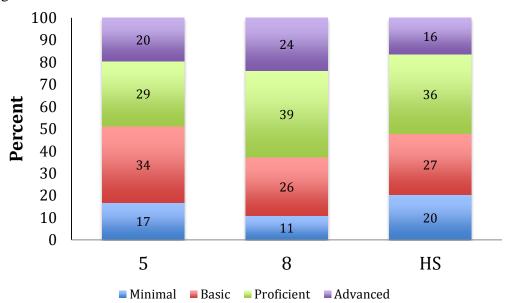


Figure 2: Percent of Students in Each Performance Level: Smoothed Results

As a point of comparison, we can compare these results to those from last year's assessment. Note that some differences would be expected because the assessment has changed from last year. However, those results can provide a reference point for evaluating the outcomes of the standard setting.

The score ranges for each performance level can be found in Table 6. As you can see, the same cut scores were used in each grade.

Table 6: Score Ranges for Each Performance Level: Previous Year

	Mini	mal	Basic		Proficient		Advanced	
	First	Last	First	Last	First	Last	First	Last
5	0	70	71	104	105	144	145	175
8	0	70	71	104	105	144	145	175
HS	0	70	71	104	105	144	145	175

Based on these cuts, the percent of students at each performance level is provided in Table 7, and graphically in Figure 3.

Table 7: Percent of Students in Each Performance Level: Previous Year

	Minimal	Basic	Proficient	Advanced
5	6	29	60	5
8	7	27	58	8
HS	16	44	36	4

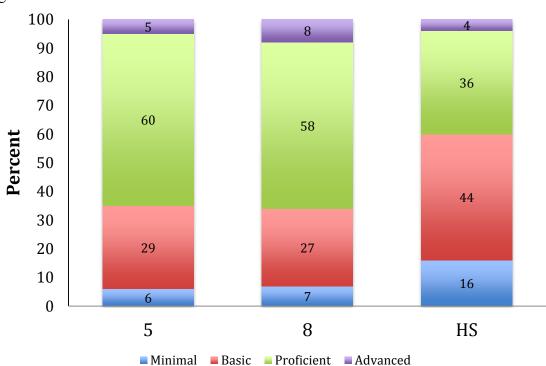


Figure 3: Percent of Students in Each Performance Level: Previous Results

With the new standards, there are slightly fewer students at the Proficient and above levels, however, the differences are not dramatic.